# Using Physiological Metaphors to Understand and Lead Organizations\*

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#### Abstract

This conceptual paper suggests and elaborates on the use of physiological metaphors pertaining to the systems and parts of the body as an approach for fostering an understanding of organizational theories among students of educational administration. The importance of this pursuit is related to the recognition that the students often reject the value of theories, that theories can be used to acquire substantive organizational knowledge, and that a comprehension of organizations is needed to lead districts and schools in the quest for achievement of their goals. The value of such understandings is based upon the work of theorists (Deming, 1993, 2000; Senge, 2001, 2006), in which conceptual constructs have been offered to substantiate the claim that the success or failure of organizations (e.g., districts and schools) to achieve their goals is influenced significantly by the ways in which they are structured.

# 1 NCPEA Publications



NOTE: This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of education administration. In addition to publication in the Connexions Content Commons, this module is published in the *International Journal of Educational Leadership Preparation*, Volume 6, Number 4 (October - December, 2011), ISSN 2155-9635. Formatted and edited in Connexions by Theodore Creighton and Brad Bizzell, Virginia Tech and Janet Tareilo, Stephen F. Austin State University. The assignment of topic editor and double-blind reviews managed by Editor, Linda Lemasters, George Washington University.

<sup>\*</sup>Version 1.2: Dec 16, 2011 7:17 am US/Central

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# 2 Sumario en espanol

Este papel conceptual sugiere y elabora en el uso de metáforas fisiológicas que pertenecen a los sistemas y partes del cuerpo como un enfoque para fomentar una comprensión de teorías organizativas entre estudiantes de la administración educativa. La importancia de este persecución es relacionada al reconocimiento que los estudiantes a menudo rechazan el valor de teorías, que teorías pueden ser utilizadas para adquirir el conocimiento organizativo sustantivo, y que una comprensión de organizaciones es necesitada para dirigir distritos y escuelas en la búsqueda para el logro de sus objetivos. El valor de tales comprensiones es basado sobre el trabajo de teóricos (Deming, 1993, 2000; Senge, 2001, 2006), en que constructos conceptuales han sido ofrecidos justificar el reclamo que el éxito o el fracaso de organizaciones (por ejemplo, los distritos y las escuelas) lograr sus objetivos son influidos apreciablemente por las maneras en las que son estructurados.

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### 3 Introduction

Responding to identified needs for students of educational administration to better understand theory and appreciate its applicability to their work (Evers & Lakomski, 2001; Gaynor, 1998; Hoy & Miskel, 2008; McClellan, 1960; Sergiovanni, 2006; Starratt, 1991), this conceptual paper presents and proposes physiological metaphors as salient constructs of organizational systems, structures, and culture. The approach is predicated upon the notion that the application of organizational knowledge and insights represents an essential underpinning to the craft of administration. Moreover, the proposed strategy reflects the notion that theories are important tools for the development of useful understandings of the practice of educational administration. In order to develop the premise of this conceptual paper, explanations have been offered regarding the relevance of the use of theories, the importance of understanding organizations, and the ways in which physiological metaphors can be used to nurture an understanding of organizations.

# 4 Relevance of the Use of Theory

Theories have been characterized as representing a basis upon which effective instruction, learning, and practice can be developed and implemented: "Theories provide explanations and establish the meaning of facts and events" (English, 2003, p. 13). The core ideas of the much praised and maligned "theory movement" in educational administration are articulated poignantly by Halpin (1958) and seem relevant to selected situations, even today. When writing about that movement, Getzels and Guba (1957) have abdicated from promoting its premises. The authors have however indicated that "the application of systematic concepts from social systems to a real situation (one of core strategies of the movement) will help the administrator to sort out problems confronting him, to examine them in appropriate contexts, and to understand something of their internal dynamic" (p. 440).

The managerial, learning, and political dimensions and dynamics of educational administration are fraught with challenges (Johnson, 1996), many of which can be analyzed and addressed more effectively with the aid of theories. Theories provide a framework, coupled with useful criteria, which can be used to approach the challenging work of administration. Using theory, phenomena can be captured into precise and useful language which can then be applied toward gaining an understanding of and making decisions about situations confronting administrators. Examples of such constructs are natural systems as proposed by Follett (1924); a technical core, which emerged from the work of Parsons (1960); the professional bureaucracy found in the work of Mintzberg (1979); and self-efficacy as described by Bandura (1997).

Students, practitioners, and even some instructors of educational administration, tend to rebuff the value of theories and abstract concepts, particularly regarding their relationship to the work of administration (Bates, 1988; Howley & Larson, 2002; Lunenburg & Ornstein, 2008). The students appear to be among those individuals, who Sergiovanni (2006) has designated as "mystics." Such individuals typically exhibit a

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disbelief that practice can benefit from an understanding of concepts emerging from theory and research. A desire to learn primarily, if not exclusively, about the methods in which to lead and manage is often expressed by such students (Howley & Howley, 2007).

A likely oversight emerging from perspectives that eschew theory is that the identification of useful leadership and management methods is frequently governed by the nature of the culture and situation (Deal and Peterson, 2009; Greenfield, 1986; Michela & Burke, 2000; Schein, 2004). When students recognize the enormity of the number of situations and needed methods, they often lose some of their determination to learn just the methods of administration. The students begin to recognize that they need a more sustaining approach (e.g. theories) that could be used to analyze and determine the methods that will work, regardless of the circumstances (cf. Howley & Howley, 2007). These students, as administrators, will operate, knowingly or unknowingly, based upon a perspective of "theories in use" (Argyris & Schon, 1974, p. 5).

However, the value of the application of theories to educational administration have been analyzed and criticized by several authors including Campbell and Faber, 1961, Culbertson, 1983, Greenfield, 1986, Griffiths, 1979, Hodgkinson, 1978, Rowan, 2006, and Willower, 1980. Other effective ways, such as reflection (Greenfield, 1975, 1986) and "minding and experiencing" (Mitchell, 2006, p. 249) have been identified in which aspiring administrators can learn to detect effective methods to lead and manage in a given situation. Regardless, the use of theories and concepts should be considered for a prominent place in the mixture of instructional approaches to educational administration (Mitchell, 2006). As stated by English, "Arguments about theory and theoretical frames are therefore crucial to the problems of practice. Practice rarely changes unless it can be grounded in theory, which supports it. So there is nothing so practical than an exposition of theory from which practice will be defined and improved" (2003, p. 5)

# 5 Importance of Understanding Organizations

Organizations and the ways in which they operate, learn, and change have been described and analyzed rather thoroughly by a plethora of authors (e.g., Argyris and Shon,1996; Bennis & Biederman, 1997; Burke, 2008; Earle & Kruze, 1999; Owens, 2001; Owens & Valesky, 2007; Scott, 1998). The natures of systems, structures, and culture have been identified as representing significant aspects, even possibly "root metaphors," of an organization (Smircich, 1983). Moreover, relationships between the operation of an organization and its systems, structures and culture are typically considered significant to the obtainment of its goals (Drucker, 1990; Handy, 1993; Weick, 1976). For example, a strategically developed staff selection process that is focused upon the obtainment of the best applicants (e.g. teachers, principals, and superintendents) seems critical to the operation of a public organization (Rebore, 2001; Seyfarth, 2008; Webb, Montello, & Norton, 1994), particularly one such as a school district, which can be vulnerable to the influence of political pressures. Without such a process, ineffective and inadequate candidates might be selected (Hoyle, Bjork, Collier, Glass, 2005; Ubben, Hughes, Norris, 2007).

Yet a somewhat contradictory perception to the importance of organizations and the manner in which they are structured appears to exist, in at least some portions of our society. The contradictory perception suggests that having the right person for the job (e.g. leader) represents the solution to many problems, a reaction which appears to reflect a sense of individualism, which is embedded in our society (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Carol & Noble, 1989; Karl, 1985; Lewis, 1955; Wills, 1997). For example, a common reaction, as exhibited in the turnover of coaches and managers at the end of each sports season, is that existing leaders and managers need to be replaced when the objectives of their organizations are not met. While replacements may warrant attention in some situations, the crux of unfulfilled objectives frequently is the manner in which the organization is aligned (Deming, 2000, Lunenburg & Ornstein, 2008; Senge, 2006). The shortcomings associated with the tendency to focus on the people at the expense of the organization are portrayed by Deming's Red Beads experiment (Neave, 1990).

The study of the organizational aspects of schools unfortunately is often overlooked (Blasé, 1984). More specifically, "Many of the problems stemming from arrangements deeply rooted in the social and economic organization (of schools) may exert a powerful effect on personal life but be impervious to personal efforts to change them. Coping failures, therefore, do not necessarily reflect the shortcomings of individuals; in a

real sense they may represent the failure of social systems in which individuals are enmeshed" (p. 173). As purported by Earle and Kruse (1999), "school improvement efforts have little chance of succeeding without an expanded understanding of current social patterns coupled with a thoughtful focus on the purpose of new patterns" (p. 216).

# 6 Using Physiological Metaphors to Nurture an Effective Understanding of Organizations

With consideration of the tendency of society in general, including students of educational administration, to fail to recognize the importance of an understanding of the dimensions and dynamics of organizations and the inclination of the students to reject the value of theories, as established earlier in this paper (Bates, 1988; Howley & Larson, 2002), we propose an approach by which the meaning and relevance of these conceptual constructs might be made clearer and be grasped more effectively by aspiring administrators. To that end, we begin by asserting the usefulness of metaphors. Historically, organizations have been likened to various metaphors (Akin & Palmer, 2000; Keys, 1991; Morgan, 2006). Tightly and the loosely coupled systems represent an example of such a metaphor (Weick, 1976). The relationship between theory and metaphor is direct and strong, as stated by Morgan "all theory is metaphor," (1997, p.5). The very nature of theory lends itself to expression through metaphor, which can and should be considered for use as a powerful and meaningful instructional tool. Using metaphors to explore, teach, and understand organizational theory is a common practice (Morgan, 1997). For example, Fayol (1949), Taylor (1911), Mintzberg (1979), and Weber (1947) each proposed a machine-like view. An organism-based perspective of organizations is offered by Kast and Rosenzweig (1973), Katz and Kahn (1978), and Trist (1977). Other metaphors of organizations, according to (Keys, 1991; Morgan, 2006) pertain to cultures, political systems, and psychic prisons.

Scholars who study organizations use metaphors to help give a more concrete nature to the abstract theories associated with organizational studies. According to Morgan (2006), "all theories of organizational and management are based on implicit images or metaphors that lead us to see, understand, and manage organizations" (p.4). Some scholars (Bourgeois & Pinder, 1983; Cornelissen, 2002; Cornelissen, Oswick, Christensen, & Phillips, 2008; Gioia, Schultz, & Corley, 2002; Morgan, 1980, Morgan, 1983, Pinder & Bourgeois, 1982; Tsoukas, 1991) have offered differing opinions and suggested the need for additional research regarding selected aspects of the application of metaphors to the understanding of organizations. However, a relatively high level of agreement appears to exist (Cornelissen, Oswick, Christiansen, and Phillips, 2008; Keys, 1991; Taber, 2011) that metaphors can be used effectively for the obtainment of a useful perspective of organizations and related theories. The entire matter seems well summarized by the statement of Palmer and Dunford (1996) that "Metaphorical analyses are an established part of organizational studies" (p. 711).

Unlike other areas of study to which future administrators are typically introduced during their course work, organizational theory and studies tend to be represented visually through models and metaphors (e.g., Getzels and Guba's [1957] model of the nomothetic and idiographic dimensions of an organization and the Burke-Litwin [2008] model of organizational change, which allow for frameworks to develop organizally). Furthermore, the use of metaphors is appropriate in organizational studies, as models and stories are often employed to illustrate abstract or new concepts. Metaphors allow instructors and students to construct a shared language, which can be used to discuss concepts and theories. According to Gabriel, Geiger, and Letiche (2010), "All and all, it would be fair to claim that metaphors and stories have become regular, active and no longer exotic guests in discourses of organizations" (p.105).

# 7 Using the Human Body as a Metaphor to Understand Organizations

For a metaphor to be useful, it should be effectively prescriptive and divergent (Hardy, Palmer, Phillips, 2000; Koch & Deetz, 1981). An explication and expansion from traditional tropes (i.e., a diversification of the metaphors) is needed to enhance understanding (Oswick, Keenoy, & Grant, 2002). With consideration of these proposed criteria, we offer a metaphor which relates the functions of the systems and parts of the body to a school organization. The actions and interactions of the systems and parts of the body seem

particularly appropriate, as a school is a living and changing unit—much like the journeys of *Dorothy and her fellow travelers in the Emerald City* (Biberman, Whitty, & Robbins, 1999)—as opposed to being a stagnant and inanimate object. For that matter, schools consist of and serve people, the purpose of which contributes to the use of the systems and parts of the body as a metaphor to increase an understanding of the systems, structures, and culture which create the school organization. For these reasons, the metaphor can provide a framework in which students of school administration can explore the complexity of organizational understanding by relating it to something with which they are already familiar.

The metaphorical construct that we propose links the various components of an organization to the corresponding parts of the body. For example, the leader of an organization could serve as the *brain* of the organization. The brain orchestrates and facilitates the majority of action taken by the various parts of the body. In other words, the brain generates ideas and sends signals, which ensure that the various parts of the body function together to execute tasks and work as a whole. An important aspect of the relationship is that the brain is dependent on the parts to implement the decisions it makes, and for this reason the brain and other parts are most effectively viewed in a holistic and integrated manner. For this reason, the brain must reach-out to all of the parts and work in unison to execute tasks effectively.

The heart can be viewed as representing the mission of an organization. The heart is the core of the body, and gives life to all of the parts. The circulatory system (i.e., arteries and veins) of the body works in a manner similar to the systems within an organization. Arteries and veins interconnect our bodies in much the same manner that the systems integrate the parts of an organization. The structure which supports and defines our body is the skeletal system (i.e., the bones). An organizational structure, like the skeletal system and bones in our body, tends to be more rigid and is necessary to give shape and form to the internal networks. The skin of the human body encompasses and acts as glue which holds together the various parts. This skin is similar to organizational culture, which is a permeable yet all encompassing part of the organization. The cells are diverse and each has a distinct purpose for the body. Similarly, the people who comprise an organization perform specialized tasks, all working simultaneously to support the whole. By using these metaphorical comparisons, an enhanced perspective can be gleaned about the individual parts of an organization, as well as the manner in which they interrelate to create and affect the entire organization. Additionally, our understanding of organizational change, strategic planning, and organizational health can be deepened when using this metaphorical approach.

The following sections expand and elaborate on the proposed metaphor. Included are consideration of the organizational systems as parallel to the body's circulatory system (i.e., the arteries and veins of the body), of organizational structures as parallel to the body's skeletal system (i.e., the bones of the body), and of organizational culture as parallel to the skin of the body.

### 7.1 Organizational Systems and the Circulatory System

Organizations exist because of an interdependence that appears to be inherently part of human nature (Spencer, 1898). Organizations are essentially collections of interdependent individuals whose distinct missions form a common vision and mission, as found in a social system as described by Getzels and Guba (1957). From a metaphorical perspective, organizational systems could be viewed as the *circulatory system* or the arteries and veins creating connectivity between individuals and groups of individuals within the larger organization. With consideration of these factors, leaders typically need to develop a clear understanding of the particular systems encompassed in their specific organization. In other words, an insightful understanding of systems thinking, a perspective which is essentially the understanding of the, "parts that create the whole," (Senge, Scharmer, Jowoeski, & Flowers, 2004, p.5) is needed by leaders.

Unlike objects that are made of multiple parts that are replaceable and must function together to create the whole (e.g., a car), living systems in organizations create themselves and continually change and grow (Senge, et al., 2004), much like the parts of a circulatory system. The different components are part of the whole as much as the whole is manifested in the parts (Senge et al., 2004.). To understand specific organizational systems, leaders should be able to understand the parts and the whole as they are essentially interrelated. This interrelatedness means that leaders must see the trees (the systems) as well as the forest

(the organization) (Senge, 2006). While the sum of all the parts represents the whole, all of the parts do not necessarily contain the whole in every circumstance (Senge, 2006). This is to say, leaders should understand that an organization's systems are simultaneously segregated as well as integrated. Organizational systems are independent and interdependent at the same time. Much like organizational systems, the circulatory system's arteries and veins are independent and service various organs, and work together to bring life to the whole. Thus, leaders are served to understand the manner in which the various systems (rational, natural, and open) are unique and yet can contribute to the collective survival of the entire organization.

When leaders are immersed within the systems of an organization, attaining an accurate view of the individual and collective roles can be challenging. More specifically, viewing accurately the manner in which the roles interface with each of the systems is often difficult, particularly when the leaders are engrossed in them on a daily basis. The obtainment of a useful perspective can be even more difficult if the leaders are not fully integrated into each of the systems of the organization. However, development of these perspectives can nurture the effectiveness of their leadership. That is to say, leaders need to be able to engage in the reflective practices of seeing their own seeing and seeing their own practices (Loughran, 2002; Roberts, 2008; Senge et al., 2004). This parallels the challenge experienced by individuals when attempting to understand the parts of their own bodies and the manner in which they interact. For example, their brains are sometimes unable to recognize the various parts because they are one of those parts of the body, i.e. the system.

Leaders can better understand and evaluate the systems and the ways in which they function by using the organization's vision, mission, and strategic goals, as measurement tools (Ewy, 2009). To this end, leaders can map (Deming, 1982) the manner in which the organization's systems "interact to create the accomplishment of outcomes (goals, mission, vision, student learning targets, stakeholder satisfaction, and so on)" (Ewy, 2009, p. 95). Leaders also may be served to seek input from an outside group (e.g. a consultant) in order to gain information and a perspective that could be used to enhance the effectiveness of the organization's systems. The proposed approach would be similar to the manner in which a specialist (e.g. a doctor of internal medicine) is retained to diagnose an illness based upon the manner in which the body's systems interact. In other words, the purpose of seeking an external viewpoint is to obtain a perspective, which is absent the bias that leaders often suffer once they become engrossed within their organization.

### 7.2 Organizational Structures and the Skeletal System

Just as organizational systems can be viewed as a metaphorical circulatory system, organizational structures can be viewed as the skeletal system, i.e., the bonesthat provide the support and framework in which the systems operate. An organizational structure, like an organizational system, pertains to the ways in which the whole (Senge, 2006), or the body, is interconnected. For example, a structure and its hierarchies can influence the ways in which the members of an organization relate to one another, just as a skeletal structure can influence the relationship with the bones. More specifically, structural hierarchies, such as Weberian (Weber, 1947) and professional bureaucracies (Mintzberg, 1979) influence the manner in which work and support roles are structured within an organization. For this reason, the type of structure can influence the capacity or lack of capacity for people and groups, within an organization, to work together, support one another, and innovate. The manner in which those people or groups interact, in turn, can influence the survival of the organization and its vision and mission. In a similar manner, the substance of the skeletal system and its parts (i.e. the bones) can influence the health and the type of lifestyle which can be pursued by a person.

The relationships between these structures and the nature of the resulting hierarchies can affect the way in which organizational decisions are made. For example, planning and decision-making may come from the top or it may be engaged in by people throughout the structure, depending upon the degree of hierarchical rigidity and flexibility (Hesselbein, 2002) such as with tightly and loosely couples structures of an organization (Bidwell, 1965; Weick, 1976) In some organizational structures, the leaders and others who make decisions may not actually be those who are at the top of the structural hierarchy (Senge, 2006). Even if the organization has a top-down structure, in which the few make decisions for the many, it is the many that do or do not actualize the decisions which are made. In a like manner, the degree of flexibility and

rigidity of the skeletal system can influence the activities in which an individual can participate. For that matter, the extreme of either status can be harmful. If the bones are too flexible, they will not be able to support the body. A skeletal system that is too rigid, on the other hand, will not be able to survive blows and falls without suffering breaks.

The intersection of an organization's structures and systems can influence its decision-making (Hesselbein, Goldsmith, & Beckhard, 1997). For this reason, a leader should consider the relationship between the structure and the system when designating "the key decisions needed to execute a strategy, identify the critical issues, data, and analysis required, and enumerate the roles and accountabilities of each individual and group involved" (Hesselbein et al., 1997, p.59). Strategic decision-making, particularly as it is part of long-term planning, should include an analysis of an organization's Strengths, Weaknesses, Opportunities, and Threats (SWOT) (Ewy, 2009). Decision-making at the structural level, in which the ingredients of SWOT are considered in conjunction with the organization's vision and mission, can contribute to the likelihood of the emergence of structurally sound decisions. In a like manner, the interfacing of the circulatory and structural system can have significant ramifications for the body. For example, the bones will begin to deteriorate if the circulatory system does not bring them nutrients. In addition, the configuration and placement of the circulatory system is dependent on the skeletal system.

During the strategic planning process (which should be on-going and cyclical), leaders can help to create structures that are supportive of the organization. Such support structures are especially important to have in place during times of change. If—as previously mentioned—an organization's structure is too rigid; it may collapse under the strains that change brings. If however the structure lacks discipline and role expectations within a given hierarchy, change may also cause the organization to fail. For example, an organization's decision to embrace shared ownership or steep hierarchies can influence its capacity to engage or not engage in effective change and decision-making (Nadler, Gerstein, & Shaw, p.59, 1992). The degree of cooperative problem-solving can cause an organization to succeed or fail, since the people within the organization will likely feel engaged or disengaged from ownership and commitment to the pursuit of the vision and mission. In a similar way, the status of the health of the circulatory system and skeletal structure are important to the manner in which the body reacts to changes. Like an organization, all parts need to work collectively in order for the whole body to work properly. It is only when the bones (i.e., the skeletal structure) are all intact and providing support for the other systems, including the circulatory system, that the internal components of the body can function effectively and can contend with external forces.

The nature of structures often dictates the capacity for an organization to adapt to change and grow. The human body must have a suitable bone structure to support growth, and without it, other parts cannot expand in a compatible manner. Hindering (e.g. authoritarian) structures tend to impede growth and change. On the other hand, enabling (e.g. open) structures tend to allow for more effective change. However, change needs to be well-planned and be based upon critical foresight. Depending on the nature of the situation and the type of change that is needed, the type of organization's structure (e.g. formal or informal) becomes increasingly important. Theorists such as Senge (2006) have contended that an organization should have structures that encourage slow and exacted changes, since faster changes may actually be slower in the long-term because they often require substantial amending to become successful. Other theorists have indicated that decision-making should be addressed in a decentralized structure that allows for greater responsiveness to needs as they arise. Similarly, the development of the entire body tends to work best when it occurs in a manner that is compatible with the growth of its systems, structures and individual parts. Otherwise, dysfunctions tend to emerge.

For these reasons, leaders typically need to be attentive to the creation of a structure which integrates both centralized and decentralized approaches. School organizations typically encompass complex, centralized bureaucracies that some would argue are rather outdated and allow only for top-down decision-making structures (Nadler et al., 1992). Such structures can be useful, in the occasional situation, which necessitates top-down management. However, districts tend to experience ongoing educational changes which are influenced by external forces such as the state and federal governments. Therefore, organizational structures are needed, which are flexible and capable of adapting to external forces (Burke, 2007). In order to remain healthy, the body's skeletal system needs to be centralized in order to act in an organized manner and to be

decentralized in order to be flexible for purposes of dealing with external forces.

## 7.3 Organizational Culture and the Body's Skin

Organizational culture can be understood as representing the skin of an organization, just as an organizational system and structure can be viewed respectively as the circulatory and skeletal dimensions of the body. The culture is the image and boundary of an organization, just as the skin is the outer surface of the body. The unique look, i.e. the identity of an organization, according to Selznick (1957) is its culture, as described in stories, myths, and legends. In a like manner, the skin provides an idiosyncratic aspect of the body. For example, each person's fingerprints are reportedly different. Moreover, the appearance of an organization's culture often reflects the status of its internal components, just as the condition of the skin often reflects the status of the body's organs.

Organizational culture acts as the skin holding the organization together (Schien, 1999) and providing it with stability (Robbins, 1998). The skin likewise encompasses everything within the organism (organization). The culture of an organization seems equally inclusive, with its relationship to the assumptions, norms, and values, which are often used to explain and give rationale for the patterns of an organization (Schein, 1999).

The assumptions, norms, and values have differing levels of depth of meaning within an organization, as the dermis, epidermis, and hypodermis represent the various levels of the skin. The levels of depth reflect the functions of the culture and skin and for this reason should be treated accordingly. A culture can be strong or weak, just as the skin of a body. A strong culture and skin can be valuable for protecting an organization and a body. However, a strong culture can impede efforts to change and enhance an organization, just as strong skin can be rigid and tear when subject to stress. A weak culture and skin would experience the opposite outcomes. In addition, the skin is capable of regrowth when cut or wounded, just as a culture can rejuvenate itself when its image is tattered. In fact, the scar that forms over a wound is often stronger than the regular skin, as is a culture, once rejuvenated.

The culture of an organization can mask and shield its behaviors from the outside world. In a like manner, select cells of the skin are part of the immune system, and serve to hide and protect the functions of the body from the outside world. These phenomena can be useful and detrimental to both an organization and body. Each will often need protection from malicious forces. However, a culture can become stagnant and troublesome if not subject to the scrutiny of its environment. Likewise, being able to view the inner workings of a body can help when attempting to diagnose and arrest an illness. Similarly, the culture (or skin) can provide homeostasis for an organization (or body). Homeostasis tends to emerge from a balanced interaction of the assumptions, norms, and values of an organization with its environment. In a like manner, select cells of the skin provide regulation for the body from becoming too cold or hot.

The culture and skin can provide a source of sensation to an organization and a human body. For example, the way in which outside forces interact with the tacit assumptions of an organization provides its members with sensations, or reactions of good, bad, pleasant, unpleasant, exciting, and boring. In a like manner, the nerve endings in the skin provide similar reactions to interactions with external forces, such as heat and cold, pressure, and cuts.

A culture can be influenced positively or negatively by its environment just as the skin can be influenced by an appropriate or excessive exposure to ultraviolet light. While these outcomes can result from exposure to the environment over a relatively short period of time, they typically emerge over a more extended period. Substantive changes to a culture are almost always long term in nature (Nadler, 1992). The skin of a young person typically looks vibrant and fresh, i.e. wrinkle-free. However, the skin typically takes on a warn look as a person reaches old age.

# 8 Summary

This conceptual paper proposes the use of physiological metaphors for teaching and learning about organizational theory. Learners can be introduced to unfamiliar and complex ideas through metaphors, a process that appears to render abstractions simpler and more easily relatable. The perspective of students immersed

in a visual culture is aided through the use of metaphors (Strati, 1997). Metaphors offer instructors the opportunity to use imagery to express concepts to learners and to create memorable experiences, which can increase learner recall. Using this constructivist teaching approach, the metaphor enables students to, "form chaotic and disconnected experiences into new wholes," (Lennie, 1999, p.51).

Additionally, metaphors provide learners with a platform upon which to create more concrete frameworks in which they can operate. Metaphors often help in taking the complex and making it simple, while still retaining the depth of the concepts and information. Metaphors provide flexibility for learners as they associate and scaffold new knowledge to the knowledge which they already know and understand. Students internalize information as they relate it to the familiar from past learning experiences, while in turn building new information. In addition, metaphors require students to make connections and think critically.

By using such metaphors as the *circulatory system*, the *skeletal system*, and the *skin*, students can grow in their understanding of the basic concepts of organizations, respectively organizational systems, structures and culture. Deeper issues, including those relating to organizational change, strategic planning, and the relationships of the parts to the whole also can be examined by extending and building upon these metaphorical understandings. A strategic plan, for example, could be likened to a wellness plan for the body. Students, when using this metaphor, could see organizations as living, changing, and complex beings rather than one-dimensional, inert entities. Additionally, students could be asked to examine and identify a wellness plan for an organization, which reflects the role of each of the components in an organization in a manner similar to the roles of the various parts of the human body. By creating these metaphorical images, students can understand organizational theory and studies in a personal and memorable way.

### 9 Conclusion

We have attempted in this conceptual paper to substantiate the need for students of educational administration to learn about, understand, and apply theories and concepts, pertaining to organizations. Grounding that effort, we recognize the tendency for some students to rebuff the theoretical and to be attentive only to practice (Howley and Howley, 2007 and the tendency of some individuals to place the responsibility of the effectiveness of an organization upon its leaders, as opposed to its structure (Deming, 2000). Insights and perspectives have been offered to suggest that the failure to give needed attention to theory (and particularly to theories pertaining to organizational understandings) represents an oversight. To help correct this omission, physiological metaphors have been proposed as a way for students to understand and apply relevant theoretical constructs to organizations.

For example, one of the roles of a leader, proposed by some authors, is to challenge the status quo of an organization. While enacting that role may represent a wise and even necessary course of action, a leader first needs to be able to identify and analyze the significant issues of the organization. More specifically, a leader needs to be able to examine the ways in which an organization is working, to develop an understanding of the effectiveness or lack of effectiveness of the workings, and to offer strategies, which can be used to build upon the functional aspects and alternates that can be used to address the dysfunctional aspects. To that end, an organization's dimensions (i.e. its systems, structures, and culture) typically need to be examined and analyzed with the use of relevant theoretical constructs. Using metaphors as surrogates for these theories in order to foster thoughtful discussions about the dimensions can facilitate the generation of helpful strategies and desired outcomes.

The model of the human body can be used to view the inter-connectivity of the functions of the organization, a dimension that is almost always important to, but too frequently missing from, the decisions of leaders. Recognition of the relationships between and among these functions can contribute to a democratic dynamic, one which can reflect authentic respect for the stakeholders of the organization and result in their sense of involvement, ownership, and commitment to the organization's vision and mission. The obtainment of this dynamic can be rare and represent a "halleluiah" moment for an organization, its leaders, and its stakeholders.

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